
***Final Completion Report
for the Allendale School
Removal Action***

General Electric Company
Pittsfield, Massachusetts

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1. Introduction

1.1 General

On October 7, 1999, a Consent Decree (CD) executed by the General Electric Company (GE), the United States Environmental Protection Agency (USEPA), the Massachusetts Department of Environmental Protection (MDEP), and several other government agencies was lodged in the United States District Court for the District of Massachusetts (U.S. District Court). The CD requires (among other things) response actions to address polychlorinated biphenyls (PCBs) and other hazardous constituents in soils, sediment, and groundwater in several areas at and near Pittsfield, Massachusetts, that collectively comprise the GE-Pittsfield/Housatonic River Site (the Site). The CD is currently subject to public review and comment prior to its entry by the U.S. District Court. However, in the CD, GE agreed to conduct certain activities at the Site prior to CD entry. These activities included the performance of a Removal Action at the Allendale School Property (the Property) in Pittsfield (defined in the CD as the Allendale School Removal Action).

On June 8, 1999, GE submitted a *Removal Design/Removal Action Work Plan for the Allendale School Property* (RD/RA Work Plan) (Blasland, Bouck & Lee, Inc., June 1999) outlining the proposed response activities at the Property. Following a meeting with the USEPA and MDEP (collectively, the Agencies) on June 15, 1999, a conference call with the Agencies on June 17, 1999, and a public meeting at the Allendale School on June 23, 1999, GE submitted an addendum to the RD/RA Work Plan (letter dated June 25, 1999), to expand upon several topics identified by the Agencies following their review of the RD/RA Work Plan, as well as those identified during the June 23, 1999 public meeting. The USEPA approved the RD/RA Work Plan and addendum via letter dated June 29, 1999. This documentation is compiled in Annex 3 to the *Statement of Work for Removal Actions Outside the River* (SOW). Annex 3 to the SOW comprises Volume V of Appendix E to the CD.

GE performed the response actions constituting the Allendale School Removal Action between July 19, 1999 and November 5, 1999. A pre-certification inspection of the Removal Action, attended by representatives of GE, USEPA, MDEP, and the City of Pittsfield was conducted on January 20, 2000, and no problems were identified. This *Final Completion Report for the Allendale School Removal Action* (Final Completion Report) has been prepared to satisfy the general requirements set forth in Paragraph 88.a of the CD and Section 3.6 of the SOW concerning the preparation of a Final Completion Report. This document summarizes the various activities performed, generally including the following:

- Ⓒ Mobilization and site preparation;
- Ⓒ Soil removal;

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- C Stormwater and groundwater collection and treatment;
 - C Off-site transport and disposal of approximately 42,000 cubic yards (cy) of impacted soils;
 - C Confirmatory soil sampling;
 - C Ambient air monitoring;
 - C Backfill and restoration;
 - C School building cleaning; and
 - C Demobilization.

The statements and certifications required by Paragraph 88.a of the CD are provided at the beginning of this Final Completion Report. In submitting this report, GE requests that the USEPA issue a Certification of Completion for the Allendale School Removal Action pursuant to Paragraph 88 of the CD.

1.2 Format of Final Completion Report

The remainder of this Final Completion Report is presented in three sections. Section 2 presents a summary of pertinent background information, including a summary of prior investigations and soil analytical data. Section 3 presents a summary of actions performed during the Removal Action, including mobilization and site preparation, soil removal and disposition, confirmatory soil sampling, stormwater and groundwater collection and treatment, backfill and restoration, school building cleaning, and demobilization. That section includes, where applicable, a description of deviations from the proposed design. Section 4 presents a description of final inspection activities, and planned Post-Removal Site Control activities to be performed by GE.

2. Background Information

2.1 General

This section provides a summary of the Property's site features and surrounding areas and land uses, and briefly describes the environmental investigations and remedial actions that have been performed (primarily by GE) dating back to 1991. The information presented in this section has been previously documented in several reports; however, it is summarized herein for completeness. The prior reporting of this information was contained in the following:

- Ⓒ *MCP Interim Phase II Report for the Allendale School Property*, Blasland & Bouck Engineers, P.C., January 1993;
- Ⓒ *MCP Supplemental Phase II Report for the Allendale School Property*, Blasland, Bouck & Lee, Inc. (BBL), August 1997;
- Ⓒ *Addendum to the MCP Supplemental Phase II Report for the Allendale School Property*, BBL, June 1998;
- Ⓒ *Summary of April 1998 Soil Removal Activities at Allendale School*, BBL, July 1998;
- Ⓒ *Pre-Design Work Plan for the Allendale School Property*, BBL, March 1999; and
- Ⓒ *Removal Design/Removal Action Work Plan for the Allendale School Property* (RD/RA Work Plan), BBL, June 1999.

The above documents provide discussions of past and current uses of the Property; Property utilities; soil, ground water, and ambient air investigations; and details of the approximate 5-acre soil cover installed by GE in 1991. Section 2.2 provides an overview of Property features. Section 2.3 summarizes prior Property investigations and analytical data, and Section 2.4 summarizes the prior remedial actions performed at the Property by GE.

2.2 Overview of Property Features

The Property is located adjacent to and north of the GE facility in Pittsfield, Massachusetts across the Tyler Street Extension, and is bordered on the other three sides by residential areas (Figures 1 and 2). The portion of the GE

Plant Area bordering the Property to the south is entirely fenced and, with the exception of an area which is leased by the U.S. Generating Company, comprises approximately 80 acres of the GE facility.

The school building located within the Property occupies approximately 40,000 square feet (including recent additions) on a parcel (City of Pittsfield Parcel ID K-11-7-29) that is approximately 12 acres in size. Prior to the construction of the school (in the 1950s), the Property was a relatively low-lying wetland area which was subsequently filled to facilitate development and construction of the school. Specifically, at the time of the school's construction, GE and the City of Pittsfield entered into an agreement under which the City removed soil material from GE property for use as fill material at the Property. The current topography of the Property is generally sloping in a southerly direction toward Tyler Street Extension, slightly toward the southeast corner of the Property. Surface elevations south of the school building range from approximately 1,010 feet (above mean sea level) to 1,005 feet, with banks located to the north and south of the rear portion of the Property.

Other notable site features include the numerous above- and below-ground utilities which traverse the Property. Figure 2 depicts the types and general locations of these utilities, based on mapping prepared in connection with school expansion activities performed in 1998.

2.3 Summary of Prior Property Investigations

Initial investigations associated with the Property were conducted in 1990, and were prompted by information obtained during construction of the U.S. Generating Company facility (formerly known as the Altresco Corporation Cogeneration Facility), located on GE property southeast of the Property. Specifically, soil sampling within this area identified the presence of PCBs and led the MDEP to perform a limited soil and surface water sampling program within the Property in January 1990. This program detected low levels of PCBs in the surficial soils in the southeast corner of the Property. In response, the MDEP instructed GE to perform further investigations to assess the presence of PCBs in soils.

Prompted by the initial detection of PCBs by the MDEP, GE performed several subsequent investigations to characterize the presence and extent of PCBs, assess the potential presence of other hazardous constituents at the Property, and support the design and implementation of certain remedial actions. These data are presented in the various reports listed above in Section 2.1.

A summary of the presence/extent of PCBs and other hazardous constituents in soils is provided below in Sections 2.3.1 and 2.3.2, respectively. Note that for those locations within the area formerly occupied by the approximate two-foot thick soil cover (refer to Section 2.4 for background on the former soil cover), the referenced depth intervals are relative to the pre-cover grade, rather than the existing soil cover surface. This reporting convention facilitates a comparison with data independent of when or where it was collected (relative to the presence of the current surface cover).

2.3.1 PCBs in Soil

Prior to the Removal Action activities performed in 1999, more than 1,300 soil samples (excluding quality control/quality assurance samples) were collected at the Property and analyzed for PCBs. Of these, 30 samples were collected from the 2-foot thick soil cover installed in 1991, and soils associated with 60 other samples had been removed as a result of various soil excavation activities (see discussion in Section 2.4). Of the remaining soil samples, more than 84 percent contained PCB concentrations less than 2 parts per million (ppm). The maximum PCB concentration measured in the soils present beneath the 2-foot thick soil cover was 1,100 ppm, while the highest PCB concentration detected in samples located outside of the soil cover was 160 ppm (estimated) at a depth of 3 to 5 feet below grade. These data served as the basis for Removal Action activities summarized in Section 3.

2.3.2 Non-PCB Constituents in Soil

Prior investigations within the Property included the collection and Appendix IX+3 analyses of 49 soil samples collected from 35 locations. (Appendix IX+3 refers to non-PCB constituents listed in Appendix IX of 40 CFR Part 264, plus three additional constituents -- benzidine, 2-chloroethylvinyl ether, and 1,2-diphenylhydrazine.) These samples were collected at various depths (including both surface and subsurface soils). Detected constituents include various volatile organic compounds, semi-volatile organic compounds, pesticides/herbicides, polychlorinated dibenzo-p-dioxins, polychlorinated dibenzofurans, and inorganic constituents. These non-PCB soil data were further evaluated as described in the RD/RA Work Plan. Based on that evaluation, no further response actions were necessary to address non-PCB constituents in the surface (top 1 foot) or subsurface (1- to 15-feet) soils within the Property.

2.4 Summary of Prior Remedial Actions/Facility Improvements

Several prior remedial actions and facility improvements have been performed at the Property over the past several years, certain of which involved the handling and/or management of PCB-containing soils. These included the placement of an approximate 5-acre soil cover, drainage improvements, the removal of approximately 700 tons of soil in conjunction with a school expansion, and the performance of remedial actions involving the removal of nearly 2,000 tons of additional soil. These activities are detailed in the prior documents previously listed in Section 2.1. A brief summary is provided below:

- C In 1991, GE constructed a soil cover over an approximate 5-acre portion of the playground area of the Property (generally over those areas where soil PCB concentrations exceeded 2 ppm within the top 3 feet of existing soil). The soil cover generally consisted of a geotextile layer, overlain with a minimum of 2 feet of “clean” soil composed of approximately 1.5 feet of compacted soil fill and approximately 6 inches of topsoil. This soil cover was constructed with MDEP approval as a Short-Term Measure (STM) under the MCP.
- C As part of the construction of the 1991 soil cover, GE also added surface water drainage enhancements to facilitate drainage at the Property, including a network of 6-inch diameter perforated drainage laterals incorporated into the soil cover.
- C In 1997, GE assisted the City of Pittsfield in the removal and off-site disposal of approximately 400 tons of soil immediately adjacent to the school building. The presence of PCBs in these soils was identified during pre-construction testing in the area(s) designated for the building expansion.
- C In 1997, GE also assisted the City of Pittsfield in the removal and off-site disposal of approximately 300 tons of soil immediately adjacent to the school building. This removal was performed in conjunction with the initial stages of construction for a new 3,000-gallon grease trap and a sanitary drainage pipeline located on the west side of the school.
- C In April 1998, GE removed approximately 2,000 tons of soil from several relatively small areas immediately adjacent to and outside of the existing soil cap along its north and east sides. This soil removal was conducted as a supplement to the STM performed by GE in 1991 (involving the installation of the 2-foot thick soil cover), and included the removal and off-site disposal of soils within the Property that (a) were not beneath the existing

soil cover, (b) were located in the uppermost three feet of the Property, and (c) contained PCB concentrations above 2 ppm.

3. Summary of Removal Actions

3.1 General

This section of the Final Completion Report describes the activities performed by GE and its contractors related to the implementation of the Removal Action conducted at the Property. The Removal Action, generally including site preparation, soil removal, and property restoration, was implemented between July 19 and November 5, 1999. The majority of the work (i.e., soil excavation and backfill activities) was completed prior to September 24, 1999. However, restoration activities continued after this date. The Removal Action was conducted on behalf of GE primarily by Maxymillian Technologies, Inc. (Maxymillian). GE also retained BBL to assist in daily on-site observation, Berkshire Environmental Consultants, Inc. (BEC) to perform ambient air monitoring during the performance of excavation activities, White Engineering, Inc., to provide restoration plans and documentation, and Janitronics Building Services, Inc., to clean the interior surfaces of the school building (following the completion of soil excavations and backfilling). In addition, Maxymillian subcontracted with Hill Engineering, Inc. (Hill Engineering) to perform survey control during the Removal Action, and Berkshire Fence, Inc., to install new fences (including the baseball field backstops) as part of site restoration. A description of the key components of this Removal Action is presented below.

3.2 Performance Standards for the Removal Action

This section of the Final Completion Report summarizes the Performance Standards for the Allendale School Removal Action. These Performance Standards served as the basis for the response actions proposed by GE in the RD/RA Work Plan. As provided in Section 2.4.2 of the SOW and Section 3.2 of the RD/RA Work Plan, the Performance Standards for the Allendale School Removal Action are as follows:

1. Except as noted in Performance Standard No. 2 below, GE shall remove all soils at the Property that contain PCBs at concentrations exceeding 2 ppm, including such soils under the approximate 2-foot cover that was installed by GE at the Property in 1991. The soil cover materials will be separately excavated and segregated from the other site soils subject to removal.
2. Within an approximate 25-foot wide strip along the rear portions of the current school building, GE shall, to the extent practicable, remove soil from two discrete locations - i.e., in the vicinity of prior sample locations A-01 and A-02. Furthermore, GE shall remove additional soils from within this strip as necessary to achieve a spatial average PCB concentration of less than 2 ppm. (This standard has been established to alleviate

concerns regarding structural support of the school building during soil removal actions, as well as potential disruptions to the utility service lines present in a particular portion of this area, while still removing, to the extent practicable, soils shown to contain greater than 2 ppm PCBs.)

3. Following soil removal, GE shall replace the excavated materials with the soil cover materials from the 1991 cover and other existing, on-site soils containing less than 2 ppm PCBs (based on existing in-situ soil sampling data), and then clean soil from an off-site location. GE shall restore the affected areas to generally match the topography, surface cover types, and facilities (e.g., ballfields and playground equipment) currently present within the affected areas.
4. Regarding the presence of Appendix IX+3 constituents other than PCBs in Property soils, GE shall ensure that the following conditions will be achieved following the performance of response actions to address PCBs:
 - (a) for polychlorinated dibenzo-p-dioxins and polychlorinated dibenzofurans (dioxins/furans), no individual sample result with a Toxic Equivalent (TEQ) concentration (calculated using USEPA's Toxicity Equivalency Factors [TEFs]) in excess of USEPA's Preliminary Remediation Goal (PRG) of 1 ppb for dioxin TEQs in residential areas; and
 - (b) for other individual constituents, any combination of the following:
 - (i) maximum constituent concentrations in any individual sample that do not exceed the USEPA PRGs for residential areas, as listed in Exhibit F to the SOW (or other residential screening PRGs based on the USEPA PRGs, as approved by USEPA), or
 - (ii) constituent concentrations that are consistent with background levels (based on summary statistics), or
 - (iii) average constituent concentrations that do not exceed the applicable Massachusetts Contingency Plan (MCP) Method 1 S-1 soil standards.

In addition, the CD and the SOW provide that excavated materials from the Property may be placed at the On-Plant Consolidation Areas (OPCAs) located within the GE Facility (the Hill 78 OPCA and the Building 71 OPCA),

subject to the Performance Standards for the OPCAs set forth in the CD and the SOW. These Performance Standards require, among other things, that materials consolidated within the Hill 78 OPCA be limited to materials that contain less than 50 ppm PCBs (as determined by an appropriate composite sampling technique or other techniques approved by the USEPA) and that are not classified as a hazardous waste under regulations issued pursuant to the Resource Conservation and Recovery Act (RCRA). In addition, materials placed within the OPCAs must not include free liquids, free product, intact drums and capacitors, other equipment that contains PCBs within its internal components, or asbestos-containing material required by applicable law to be removed from structures prior to demolition.

3.3 Description of Removal Action Activities

3.3.1 Overview

The Removal Action conducted at the Property was performed in several phases. The various activities generally included mobilization and site preparation (removal of above-ground vegetation and existing playground equipment); removal of the existing soil cover; removal of soils with PCBs greater than 2 ppm and transport/placement of those soils at one of the OPCAs (or, for soil containing over 50 ppm PCBs, at a temporary stockpile prior to consolidation at the Building 71 OPCA); backfill and restoration of the excavated areas; and restoration of vegetation, pavement, and playground equipment within the Property. During the Removal Action, work activities were documented through the preparation of field notebooks, photographs, and preparation of weekly project status reports, which were regularly submitted to the Agencies. Further details regarding these activities are presented below. An As-Built Restoration Plan, developed by Hill Engineering is provided in Appendix A to this Final Completion Report, and representative site photographs taken during and after completion of the Removal Action are included in Appendix B.

3.3.2 Pre-Removal Action Activities

Prior to mobilization/site preparation, several activities were conducted, such as meetings and preparation of various Contractors' submittals, and correspondence clarifying specific issues. The pre-mobilization activities generally followed those described in Section 4.3 of the RD/RA Work Plan.

3.3.3 Mobilization and Site Preparation

Initial mobilization and site preparation activities were performed between July 19 and July 24, 1999. In general, the following activities were performed:

- C Labor, equipment, a portable sanitary facility, an office trailer, and other materials, were mobilized to the Property.
- C Certain windows, doors, air intakes, and air conditioning units on the school building were sealed with polyethylene sheeting and duct tape, in coordination with City Officials. These activities were performed as a precautionary measure to reduce the potential for dust to enter the school building.
- C Each worker was required to familiarize himself or herself with the Contractor-specific and GE Health and Safety Plans (HASPs), and related orientation and safety meetings were held as required in the HASPs.
- C Underground and above-ground utility lines within or adjacent to the proposed limits of excavation by DIGSAFE and City representatives, and underground or above-ground utilities which were found to be within the proposed limits of excavation (e.g., 8-inch diameter sanitary sewer line) were dismantled, protected, or re-routed.
- C The anticipated horizontal limits of soil removal were delineated.
- C Erosion and sedimentation control measures were installed (i.e., a staked silt fence around the proposed limits of excavation).
- C Fencing and playground structures/objects which could be affected by soil removal activities (e.g., the ballfield backstops and playground structures) were removed.
- C Temporary fencing was installed to delineate and secure areas of active removal activities. In addition, temporary fencing was placed in areas where prior fencing was removed, and from the school building to the property fencing, in order to delineate and secure the Property.

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- C Removal and chipping of trees, shrubs, or other vegetation which could be affected by soil removal activities was conducted. Grubbing of the stump and root system of removed trees was performed concurrently with soil removal activities, with the grubbed tree stump and root system disposed of along with the adjacent excavated soil. Chipped materials were utilized as cover material for the temporary access roads, and subsequently disposed of at the Hill 78 OPCA.
 - C Temporary access roads were constructed to facilitate access to the work site for excavation equipment and the vehicles to be used for transporting excavated soils to the OPCAs and transporting clean soils to the Property for backfilling. The temporary access roads were constructed at the southeastern corner of the school property along Virginia Avenue, at the southwest corner of the property, connecting to Tyler Street Extension, and along the southern, eastern, and western portions of the removal areas. The approximate locations of the access roads are shown on Figure 2. The access roads consisted of a layer of woven geotextile fabric covered by a layer of crushed stone or chipped vegetation. As excavations were completed in those areas beneath the access roads, the access road materials were excavated along with the underlying soils, and placed into the OPCAs (as appropriate for the underlying soils).
 - C A bermed staging area was constructed, using a 2.5 foot high soil berm and high-density polyethylene (HDPE) liner, for on-site tanks (frac tanks) to be used for containerizing groundwater pumped from excavated areas.
 - C A temporary staging area was constructed for placement of clean, reusable on-site soil. This area was used to stockpile soil and topsoil from the soil cover installed in 1991, and soil containing less than 2 ppm PCBs which was removed to gain access to other soils underneath select areas. These stockpiled materials were later used as clean backfill or topsoil in the excavated areas.

3.3.4 Temporary Soil Stockpile Areas

Since the CD had not yet been lodged at the time that the Allendale School Removal Action was initiated, it was necessary to place the excavated materials into temporary stockpiles to be consolidated at the Hill 78 OPCA and Building 71 OPCA. For materials subject to final consolidation at the Hill 78 OPCA, approval was received from USEPA to temporarily place such soils within the “footprint” of that OPCA. The soils would be placed in a fashion consistent with the intended use of the area as the OPCA (materials were placed and compacted in lifts and daily cover was applied), and would remain in place as “consolidated” material following entry of the CD.

With respect to the Building 71 OPCA, that OPCA was under construction at the start of the Removal Action, and was therefore not operational. At that OPCA, the need for additional site preparation and base liner construction precluded temporary stockpiling within that specific area. Therefore, with USEPA approval, a temporary storage area was constructed near the planned location of the Building 71 OPCA to contain soils with PCBs greater than 50 ppm. Approval of these activities was provided by USEPA via letter dated July 12, 1999. This approval allowed soils to be stored within this area for up to 180 days. This time limit for soil storage was extended to be no later than May 19, 2000, following a subsequent request by GE via a letter dated December 22, 1999, and subsequent USEPA letter January 5, 2000.

The footprint of the temporary storage area was prepared by grading the area and removing all protruding objects (e.g., stones, roots, etc). A 12-inch high soil berm was constructed along the horizontal perimeter of the temporary storage area. The temporary storage area was then lined with two layers of 12-mil thick polyethylene liner, with a 6-inch layer of sand placed over the liner. Upon placement of excavated materials in the temporary storage area, the materials were covered with two layers of polyethylene, which extended over the top of the perimeter berm and was secured to the ground. The area was marked and inspected weekly during the period of temporary storage. A detailed description of the construction of the temporary storage area was provided to the USEPA in a letter dated July 16, 1999. These soils presently remain in place at the temporary storage area, and will be moved into the Building 71 OPCA no later than May 19, 2000.

3.3.5 Soil Removal and Disposition

Soil removal activities were initiated on July 22, 1999. The excavation activities were initially performed within the limits identified in the RD/RA Work Plan. In general, once an area was excavated to predetermined limits, confirmatory soil samples were collected and analyzed for PCBs (in accordance with the confirmatory sampling plan contained in the RD/RA Work Plan) to demonstrate compliance with the appropriate Performance Standard(s). If the analytical results for the confirmatory soil samples were above the established Performance Standard(s), then additional excavation was performed. The excavation generally progressed in a north to south direction (away from the school building), and was substantially complete by August 25, 1999. Excavations were performed to depths ranging from 2 to 12 feet within the horizontal limits indicated on Figure 2. Survey control was performed concurrent with the excavation activities.

Based on review of the available Appendix IX+3 data presented in Section 3.5 of the RD/RA Work Plan, soils at the Property were determined not to constitute hazardous waste under applicable regulations pursuant to RCRA. This determination was made based on the results of an evaluation conducted in accordance with Performance Standard #5 in Section 2.1.4.2 of the SOW. Accordingly, the segregation of materials for subsequent disposition as reusable backfill or for consolidation at one of the two OPCAs was based on the PCB concentration of the soils as follows:

- C Clean topsoil in areas to be excavated, including approximately the uppermost six inches of soil associated with the 1991 soil cover (approximately 4,000 cy), was segregated, staged within the Property, and later used as topsoil during restoration activities. Following placement of the topsoil into a temporary stockpile within the Property, the stockpile was hydroseeded to allow a vegetative cover to be established, enhancing dust and erosion control efforts.
- C Remaining soils associated with the 1991 soil cover and other soils containing 2 ppm or less PCBs (approximately 13,000 cy) were segregated, staged within the Property, and later reused as backfill material. Following placement of the reusable backfill material into a temporary stockpile, the stockpile was hydroseeded to allow a vegetative cover to be established, enhancing dust and erosion control efforts.
- C Soils with PCB concentrations greater than 2 ppm and less than 50 ppm, as well as soils containing less than 2 ppm PCBs which could not be economically segregated for possible re-use as backfill, were transported to and temporarily stored at the Hill 78 OPCA. Approximately 34,000 in-situ cy of soil was transported to the Hill 78 OPCA.
- C Soils with PCB concentrations of 50 ppm or greater, which were segregated as materials regulated under the Toxic Substances Control Act (TSCA), were transported to the temporary stockpile described above for subsequent consolidation within the Building 71 OPCA. Approximately 7,300 in-situ cy of soil was placed in the temporary stockpile area near the Building 71 OPCA.

As explained in the RD/RA Work Plan, initial soil removal limits and removal volumes were estimated based on the available data set using a mid-point approach. This approach identified the mid-point locations between those discrete sample locations exceeding 2 ppm and those adjacent sampling locations where the PCB concentrations were shown to be less than 2 ppm. This approach also served as the basis for determining the disposition of soils

once excavated (e.g., soil disposition at the Building 71 OPCA or the Hill 78 OPCA, re-use as backfill, etc.). Such an approach was considered to be conservative relative to other possible techniques for identifying TSCA-regulated soils subject to disposition at the Building 71 OPCA, such as composite sampling or other averaging techniques that would have been allowed under the Performance Standards for the OPCAs. Although GE stated in the RD/RA Work Plan that it might elect to perform additional sampling of excavated materials designated as having 50 ppm PCBs or greater prior to the placement of such materials within the Building 71 OPCA (in order to conserve the future capacity of the area), GE ultimately elected not to perform such additional testing and simply transferred these materials to the temporary soil stockpile for subsequent placement in the Building 71 OPCA.

As appropriate, soils were loaded directly into trucks positioned on the temporary access roads. The trucks then left the Property via the access road constructed at the southwestern corner of the Property and proceeded across Tyler Street Extension to the Hill 78 OPCA or the temporary stockpile used for staging material prior to its consolidation within the Building 71 OPCA (Figure 2). While on the Property, the trucks remained on the temporary access roads so that contact with the underlying soils was avoided. However, during transport to and within the OPCAs, the trucks traveled on access roads which were sprayed with water to minimize airborne dust. Prior to departure from the OPCAs, the wheels and undercarriages of the transport vehicles were inspected for soil accumulations. Accumulated soils were manually brushed from the vehicle at a dedicated vehicle inspection location at the Hill 78 OPCA. Any soils which were brushed off of the vehicles remained at the Hill 78 OPCA.

During the performance of excavations, the limits of excavation for the Property were surveyed to initially guide the excavations relative to the limits specified in the RD/RA Work Plan, and subsequently document final excavation limits. This final survey information is presented on Figure 3. The removal limits for many of the excavated areas were extended due to PCBs detected at concentrations greater than 2 ppm in the confirmatory samples as discussed in Section 3.3.6 below. This contributed to an increase in the total volume of soil that was excavated from the Property and transported to the OPCAs for disposal. The previous estimate of excavated material was approximately 29,000 in-situ cy, while the final estimate of excavated material is approximately 42,000 in-situ cy.

3.3.6 Confirmatory Soil Sampling

In accordance with the RD/RA Work Plan, the intent of the confirmatory soil sampling was to confirm that the horizontal limits of removal within a given depth increment were acceptable relative to the Performance Standards

set forth in the SOW and the RD/RA Work Plan, and summarized in Section 3.2 of this report. As discussed in Section 3.4 of the RD/RA Work Plan, the initial limits of excavation were generally developed using a mid-point approach, representing a point between soil samples which had PCB concentrations greater than 2 ppm and soil samples which had PCB concentrations less than 2 ppm. Confirmatory soil sampling activities included the following components:

- C Composite samples were collected along the perimeter of the excavations to represent each two-foot depth increment of interest. Along the perimeter of such areas/depths of interest, samples were collected at an approximate frequency of 4 samples per 100 linear feet, and composited for a single analysis for PCBs. A portion of each soil sample subject to compositing was retained/archived to allow for possible analysis in the future.
- C Samples were analyzed by Adirondack Environmental Services, Inc., of Albany, New York. These samples were analyzed under a rapid turnaround time (12-24 hours), in accordance with the provisions of GE's *Sampling and Analysis Plan/ Data Collection and Analysis Quality Assurance Plan* (SAP/DCAQAP) (draft, dated October 1998).
- C A composite PCB sample result below 2 ppm confirmed that acceptable removal had occurred for the area/depth of interest. When PCB results greater than 2 ppm were realized, GE either extended the limits of soil removal in an outward direction and resampled in accordance with the above protocols, or analyzed one or more of the archived samples.

Table 1 presents a description of the confirmatory soil samples collected during this Removal Action which represent soils remaining at the Property. Appendix C presents a description of the confirmatory soil samples collected during this Removal Action which were ultimately removed during excavation activities.

During the week of August 14, 1998, GE proposed a slight change to the procedures for collection and analysis of post-excavation samples. Due to the stringent time constraints for this project and the number of areas that had previously required additional excavation due to post-excavation sampling results, GE proposed to collect confirmatory soil samples (using a Geoprobe) prior to completing excavation activities within certain areas, so as to reduce the number of areas subject to additional resampling and excavation and the time associated with those activities. The USEPA verbally approved this approach with the understanding that these samples would be

collected at the same frequency as post-excavation confirmatory soil samples (i.e., one composite every 100 linear feet) and at the proper elevations specified in the RD/RA Work Plan. It was also agreed between GE and USEPA that samples collected in certain areas using this method that contain PCB concentrations less than 2 ppm would satisfy the post-excavation confirmation sampling requirements for these areas. This agreement was documented in the Weekly Status Reports for the Allendale School Property Removal Action.

Soil samples representing soils remaining at the Property (see Table 2 and Figure 3) have been reviewed in accordance with the data evaluation procedures in GE's proposed *Field Sampling Plan/Quality Assurance Project Plan* (FSP/QAPP), dated January 2000 (pending approval), which is an updated version of the prior SAP/DCAQAP. The results of this review (presented in Appendix D) confirm that the quality of the data was within acceptable limits, and all of the data were determined to be usable for confirmation purposes.

3.3.7 Stormwater and Groundwater Collection and Treatment

During the period when soil excavations were occurring, stone-lined sumps were constructed to collect any precipitation runoff or groundwater infiltration into the excavation areas. The sumps were constructed in areas where deeper excavations were anticipated to occur. Several days prior to excavation within an area, the sumps were installed and water was pumped from the excavation. This procedure resulted in a localized drawdown of the water table, which in turn resulted in relatively dry excavation conditions in such areas. This local pumping continued until the area was backfilled to an elevation above the normal groundwater table. The collected water was pumped to one of two on-site holding tanks (frac tanks). The frac tanks were emptied as needed into tanker trucks and the water was transported to GE's 64-G water treatment facility. This method of collecting and treating stormwater and groundwater was proposed by GE to the USEPA via letter dated June 24, 1999, and subsequently approved by the USEPA via letter dated July 12, 1999. Analytical data characterizing this water are presented in Appendix E. The approximate volumes of water transported each day were presented in the weekly reports submitted to the Agencies.

Following completion of pumping at the Property, residuals were removed from the frac tanks, sampled, and transported to and placed in the temporary stockpile at the Building 71 OPCA. Analytical data characterizing these residuals are included in Appendix E.

3.3.8 Ambient Air Monitoring

During excavation activities at the Property, ambient air monitoring for particulate matter was performed by BEC adjacent to the excavation areas in accordance with the RD/RA Work Plan. The results of these activities are presented in a report prepared by Berkshire Environmental Consultants, which is included as Appendix F to this Final Completion Report. Monitoring for particulate matter was performed on each day that excavation activities were conducted. Particulate monitors were placed at four locations around the Property, plus an off-site background location in Pittsfield. Monitoring was conducted from approximately 7:00 a.m. to 5:00 p.m. each work day for the duration of excavation activities. The results of monitoring are summarized as follows:

Area	Average Particulate Concentration (milligrams per cubic meter, mg/m ³)
North of Excavation	0.018
South of Excavation	0.036
East of Excavation	0.025
West of Excavation	0.023
Background	0.018

At no time did the average daily particulate concentration exceed the 24-hour average National Ambient Air Quality Standard for particulate matter of 0.150 mg/m³. Dust control measures were implemented throughout the excavation and backfill activities. Soil stockpiles (for later use as backfill) were hydroseeded and continuously monitored and watered as necessary. Access roads and excavation areas were also monitored and watered on a continuous basis during dry periods to prevent wind-generated dust. In addition, public roadways used by the transport vehicles to transport clean backfill to the property were cleaned regularly with a Street Sweeper.

3.3.9 Backfill and Restoration

Following confirmation that excavation activities had achieved the Removal Action Performance Standards for the Property, the affected areas were backfilled. Backfill materials used for this project consisted of common fill, gravel, or topsoil and were obtained from sources previously reviewed by GE and approved by the MDEP. In addition, topsoil and other soil materials originally used in construction of the 1991 soil cover, as well as topsoil and other soils with PCBs less than 2 ppm, were used as topsoil or backfill. The associated laboratory analytical

data for the off-site backfill and sod sources, as well as additional sampling of the 1991 soil cover, are presented in Appendix G.

Surface restoration of the excavated areas consisted of installing sod, asphalt, recreational structures (playsets, ballfields, walking track, etc.), and landscape plantings, generally in accordance with the specifications presented in the *Site Restoration Plan at Allendale School* (White Engineering, Inc., September 1, 1999). Further details regarding the backfilling and restoration activities are provided below. The location of surface features and structures are presented in the As-Built Restoration Plan, provided by Hill Engineering (Appendix A).

Restoration of affected lawn areas began with the placement and compaction of appropriate backfill material to within 4 to 6 inches of final grade. Once placed, the common backfill material was compacted with a roller. None of the excavated areas required additional measures or precautions, because the groundwater within an excavated area was depressed until backfilling activities reached elevations higher than the normal groundwater table elevation in that area.

During backfilling activities, the existing storm and sanitary sewer lines which traversed the southern portion of the school playground were replaced. The location of the storm sewer line is shown on Figure 2. The sanitary sewer line was not indicated on any of the pre-excavation drawings, and was discovered only after excavations had started. During excavation activities near this line, a bypass system was installed to pump materials within the sanitary sewer line around the excavation area. The portion of the sanitary sewer line passing through the excavation area was then removed. Following excavation activities, the portions of the sanitary sewer line which had been removed were replaced with like materials generally in the same location (see Figure 4).

Prior to placement of topsoil and sod, 6-inch diameter perforated pipe drainage laterals were installed at a depth of approximately two feet below grade, generally as shown on Figure 4. Drainage laterals were installed generally to match the sub-grade drainage system installed as part of the soil cover in 1991. In addition, this drainage system was enhanced with the installation of a new series of drainage laterals in the eastern portion of the playground (see Figure 4).

Several improvements were made to the existing grade in order to provide better surface drainage within the school yard. Surface elevations in the eastern and southeastern portions of the school yard were increased slightly. These

increases in elevation, along with the installation of subgrade drainage laterals, are anticipated to improve the historically wet conditions of these areas.

Following completion of backfilling activities, replacement of removed utilities, and installation of drainage laterals, 4 to 6 inches of clean topsoil was placed to establish the final grade. Where necessary, the topsoil was fine-graded to generally match the surrounding surface contours. The affected lawn areas were then covered with sod and watered.

As necessary, grass areas (outside the limits of excavation) that were damaged due to the Removal Action were also restored with sod. This consisted of removing the existing grass, regrading the area with additional topsoil to generally match the surrounding surface contours (as needed), and installing new sod.

Restoration of affected asphalt areas (i.e., portions of the asphalt along the western portion of the school building, portions of the asphalt along the rear of the school building, and the asphalt sidewalk to the playset) began with the placement and compaction of common backfill. The common backfill was placed as described above to within 7 to 9 inches of final grade. A total of approximately 4 to 6 inches of gravel material was then placed in 3- to 4-inch lifts on top of the common fill and compacted. The final 3 inches of the excavation was restored with a 2-inch layer of binder asphalt and a 1-inch layer of top asphalt. The asphalt material was placed and compacted to generally match the surrounding surface contours and to promote positive drainage. Following placement and curing of asphalt materials, a coat of asphalt sealant was placed over the existing asphalt areas.

Restoration of recreational structures on the school property consisted of reassembly of the existing playset, installation of a soccer field, installation of two baseball fields, construction of a walking track, and installation of a paracourse system. These structures are shown on the As-Built Restoration Plan, included in Appendix A to this Final Completion Report.

Restoration of landscaping items consisted of the installation of new shrubs and trees, primarily along the southern border of the school property. A row of blue spruce was planted along the southern property line, south of the walking track. Sweet Gum trees were also planted in this area, in a line north of the walking track. Additional sweet gum trees, originally designed to be planted in the southern portion of the playground, were planted along the northern portion of the excavated areas, south of the school building. These trees were initially proposed to be placed in line with the rest of the sweet gum trees in the southern portion of the property; however, they would

have posed a potential hazard to baseball players near the infields. Hence, they were planted along the northern portion of the excavation area following discussions with City officials.

On Thursday, September 16, 1999, GE received a telephone call from the City of Pittsfield indicating that an existing 8-inch diameter sanitary sewer was damaged/plugged directly behind the school building. GE and Maxymillian arrived at the Property and the City of Pittsfield excavated a section of this sewer and identified sections of the sewer pipe that had collapsed. Based on Maxymillian's review of this condition, Maxymillian agreed that it would repair this section of the sewer between the two existing manholes, and it subsequently did so.

3.3.10 School Building Cleaning

Upon completion of excavation and backfilling activities, GE conducted a thorough cleaning of the inside of the school building. On September 4 and 5, 1999, the following tasks were performed in accordance with prior discussions with City and School officials:

- Ⓒ All interior wall surfaces and horizontal ledges were thoroughly washed with an all-purpose detergent;
- Ⓒ All student desks and chairs were completely washed down with a heavy-duty detergent;
- Ⓒ Interior windows and frames were washed;
- Ⓒ Bathrooms were completely cleaned, including all ceiling, wall, and floor surfaces, and all fixtures and mirrors;
- Ⓒ Vinyl flooring was stripped of all old finish and refinished;
- Ⓒ All carpeted areas were cleaned via a hot water extraction method using a detergent approved by the Director of Custodial Services; and
- Ⓒ All heating/air conditioning vents were cleaned and filters replaced.

Following cleaning activities, wipe samples were taken from select surfaces within the school building for PCB analysis. Results of this sampling are presented in Appendix H.

3.3.11 Demobilization

At the completion of site restoration activities, contractor labor, equipment, excess materials, temporary erosion and sedimentation control measures, and sanitary facilities were removed from the site. Demobilization was essentially completed by November 5, 1999. Following completion of all off-site soil transportation, all equipment was cleaned at the Hill 78 OPCA using a high-pressure water spray. The water used in the cleaning operations was collected and transported to GE's 64-G Water Treatment Facility for treatment. Results of the confirmation wipe sampling of equipment are presented in Appendix I to this Work Plan.

4. Post-Removal Site Control Activities

This section describes the post-removal inspection/monitoring conducted at the Property to date and presents GE's Post-Removal Site Control Plan for the Allendale School Removal Action, as required by Section 3.7 of the SOW.

On December 9, 1999, pursuant to Section 4.8 of the RD/RA Work Plan, the restored surfaces were inspected to identify potential problems associated with the restoration activities, such as settlement, stressed vegetation, or poor drainage. No issues were identified during that inspection.

Similar inspections will be performed two times per year (in April and October) during the two years (2000 and 2001) following the completion of the Removal Action. Thus, the Property will be inspected during April and October of these years to assess any ground settlement issues, to ensure that the vegetation is growing as anticipated and is providing the necessary erosion control, and that the restored/enhanced drainage system(s) are functioning properly. Additional planting will be undertaken as needed to replace dead or dying vegetation or to fill in any gaps resulting from less than adequate growth. In addition, if any drainage problems are identified that are attributable to the response actions conducted at the Property, drainage modifications or other appropriate measures will be performed, as necessary.

Within 60 days following completion of the semi-annual inspections in 2000 and 2001, GE will submit to USEPA an inspection report, which will include the following information:

- C a description of the type of inspection activities conducted;
- C a description of any significant modifications to the inspection program made since the submission of the proceeding inspection report;
- C a description of any conditions or problems noted during the inspection which are attributable to the response actions conducted at the Property, and;
- C a description of any measures taken or to be taken to correct such conditions or problems identified during the inspection.

Table

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Table 1**General Electric Company -- Pittsfield, Massachusetts****Final Completion Report for the Allendale School Property Removal Action****Confirmation Soil Sample Results (Remaining Soils)**

(PCB results are presented in dry-weight parts per million, ppm)

Sample ID	Date Sample Collected	Date and Time Sample Results Received	PCB Analytical Result	Sampling Interval	Comments
AS-PE-2	7/23/99	7/24/99 (0704)	0.22	4-6' BGS (1,012'-1,010')	Collected from north, west, and south side walls of Area C.
AS-SLC-00002-0-0040	7/23/99	7/26/99	ND(0.56)	4-6' BGS (1,012'-1,010')	USEPA split sample of AS-PE-2.
AS-PE-COMP-1	7/27/99	7/28/99 (0704)	0.18	2-4' BGS (1,014'-1,012')	Collected from north, west, and south side walls of Area NN.
AS-SLC-00003-0-0020	7/27/99	7/28/99	2.0	2-4' BGS (1,014'-1,012')	USEPA split sample of AS-PE-COMP-1.
AS-PE-COMP-5	7/28/99	7/29/99 (0650)	0.017 J	8-10' BGS (1,006'-1,004')	Collected from west and south side walls of Area F.
AS-PE-COMP-6	7/28/99	7/29/99 (0650)	0.019 J	8-10' BGS (1,006'-1,004')	Collected from south and east side walls of Area F.
AS-SLC-00005-0-0080	7/28/99	7/29/99	ND(0.58)	8-10' BGS (1,006'-1,004')	USEPA split sample of AS-PE-COMP-6.
AS-PE-COMP-7	7/28/99	7/29/99 (0650)	2.0	2-4' BGS (1,007'-1,005')	Collected from northwest side wall of Area CC.
AS-PE-30	7/28/99	7/31/99 (0337)	1.7	2-4' BGS (1,007'-1,005')	Discrete sample of AS-PE-COMP-7.
AS-SLC-00006-0-0020	7/28/99	7/29/99	ND(0.67)	2-4' BGS (1,007'-1,005')	USEPA split sample of AS-PE-COMP-7.
AS-PE-COMP-8	7/28/99	7/29/99 (0650)	0.59	2-4' BGS (1,008'-1,006')	Collected from all side walls of Area DD.
AS-PE-DUP-2	7/28/99	7/29/99 (0650)	0.58	2-4' BGS (1,008'-1,006')	Duplicate sample of AS-PE-COMP-8.
AS-PE-COMP-10	7/29/99	7/30/99 (0632)	0.099	4-6' BGS (1,005'-1,003')	Collected from north side wall of Area CC.
AS-PE-DUP-3	7/29/99	7/30/99 (0632)	0.089	4-6' BGS (1,005'-1,003')	Duplicate sample of AS-PE-COMP-10.
AS-PE-COMP-11	7/29/99	7/30/99 (0632)	0.23	4-6' BGS (1,012'-1,010')	Collected from all four side walls of Area E.
AS-PE-COMP-14	7/30/99	7/31/99 (0337)	0.39	2-4' BGS (1,007'-1,005')	Collected from north side wall of Area H.
AS-SLC-00008-0-0020	7/30/99	8/2/99	ND(0.72)	2-4' BGS (1,007'-1,005')	USEPA split sample of AS-PE-COMP-14.
AS-PE-COMP-16	7/31/99	8/1/99 (2225)	0.14	4-6' BGS (1,003'-1,001')	Collected from north/east side walls of Area BB.

(See Notes on Page 10)

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Sample ID	Date Sample Collected	Date and Time Sample Results Received	PCB Analytical Result	Sampling Interval	Comments
AS-PE-COMP-17	7/31/99	8/1/99 (2225)	0.20	2-4' BGS (1,006'-1,004')	Collected from east side walls of Areas AA and Z.
AS-PE-COMP-18	7/31/99	8/1/99 (2225)	0.066	4-6' BGS (1,004'-1,002')	Collected from east side walls of Areas AA and Z.
AS-PE-COMP-19	7/31/99	8/1/99 (2225)	ND(0.038)	6-8' BGS (1,002'-1,000')	Collected from east side walls of Areas AA and Z.
AS-SLC-00009-0-0040	7/31/99	8/2/99	ND(0.57)	6-8' BGS (1,002'-1,000')	USEPA split sample of AS-PE-COMP-19.
AS-PE-COMP-20	7/31/99	8/1/99 (2225)	0.069	2-4' BGS (1,006'-1,004')	Collected from east side wall of Area Z.
AS-PE-COMP-21	7/31/99	8/1/99 (2225)	ND(0.039)	4-6' BGS (1,004'-1,002')	Collected from east side wall of Area Z.
AS-PE-COMP-22	7/31/99	8/1/99 (2225)	ND(0.038)	6-8' BGS (1,002'-1,000')	Collected from east side wall of Area Z.
AS-PE-COMP-23	7/31/99	8/1/99 (2225)	ND(0.036)	8-10' BGS (1,000'-998')	Collected from north/east side walls of Area AA.
AS-SLC-000010-0-0060	7/31/99	8/2/99	ND(0.57)	8-10' BGS (1,000'-998')	USEPA split sample of AS-PE-COMP-23.
AS-PE-DUP-5	7/31/99	8/1/99 (2225)	ND(0.038)	8-10' BGS (1,000'-998')	Duplicate sample of AS-PE-COMP-23.
AS-PE-COMP-24	7/31/99	8/1/99 (2225)	ND(0.012)	8-10' BGS (1,000'-998')	Collected from east/south side walls of Area AA.
AS-PE-COMP-25	7/31/99	8/1/99 (2225)	ND(0.038)	8-10' BGS (1,000'-998')	Collected from north/west side walls of Area AA.
AS-PE-38	7/31/99	8/1/99 (2225)	2.1	4'-6' BGS (1,005'-1,003')	Discrete sample of AS-PE-COMP-10. This sample, averaged with sample AS-PE-COMP-10 and AS-PE-DUP-3, resulted in an overall average of 0.762 ppm PCBs for this side wall.
AS-PE-COMP-30	8/2/99	8/3/99 (0639)	0.54	2-4' BGS (1,005'-1,003)	Collected from north/east side wall of Area T.
AS-PE-COMP-31	8/2/99	8/3/99 (0639)	0.34	2-4' BGS (1,005'-1,003)	Collected from east/south side wall of Area T.
AS-PE-COMP-32	8/2/99	8/3/99 (0639)	8.7	2-4' BGS (1,005'-1,003)	Collected from south side wall of Area T. This area is along the property line and no further excavation will be required.

(See Notes on Page 10)

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Sample ID	Date Sample Collected	Date and Time Sample Results Received	PCB Analytical Result	Sampling Interval	Comments
AS-PE-COMP-33	8/2/99	8/3/99 (0639)	0.46	2-4' BGS (1,005'-1,003')	Collected from west side wall of Area CC.
AS-PE-DUP-6	8/2/99	8/3/99 (0639)	0.39 J	2-4' BGS (1,007'-1,005')	Duplicate sample of AS-PE-COMP-33.
AS-SLC000012-0-0040	8/2/99	8/3/99	ND(0.69)	2-4' BGS (1,007'-1,005')	USEPA split sample of AS-PE-COMP-33.
AS-PE-COMP-34	8/3/99	8/4/99 (0321)	1.6	1,008'-1,006'	Collected from west, south, and east side walls of Area B.
AS-PE-COMP-35	8/3/99	8/4/99 (0321)	1.3	1,003'-1,002'	Collected from west side wall of Area G.
AS-PE-COMP-36	8/3/99	8/4/99 (0321)	0.023 J	1,002'-1,000'	Collected from west side wall of Area G.
AS-SLC000014-0-0060	8/3/99	8/4/99 (1515)	ND(0.59)	1,002'-1,000'	USEPA split sample of AS-PE-COMP-36.
AS-PE-COMP-39	8/3/99	8/4/99 (0321)	0.10	1,008'-1,006'	Collected from south/east side walls of Area A.
AS-PE-COMP-41	8/3/99	8/4/99 (0321)	0.47	1,008'-1,006'	Collected from east/south side walls of Area A.
AS-PE-COMP-44	8/3/99	8/4/99 (0321)	1.0	1,001'-999'	Collected from west side wall (north end) of Area W.
AS-PE-COMP-45	8/3/99	8/4/99 (0321)	ND(0.039)	1,001'-1,000'	Collected from north side wall of Area G.
AS-PE-COMP-46	8/3/99	8/4/99 (0321)	0.023 J	1,005'-1,003'	Collected from northeast side wall of Area BB.
AS-PE-COMP-51	8/4/99	8/5/99 (0347)	0.77	1,004'-1,002'	Collected from west, south, and east side walls of Area D.
AS-PE-COMP-53	8/5/99	8/6/99 (0655)	ND(0.040)	997'-995'	Collected from northwest side wall of Area Y.
AS-PE-COMP-54	8/5/99	8/6/99 (0655)	ND(0.042)	999'-997'	Collected from northwest side wall of Area Y.
AS-PE-COMP-55	8/5/99	8/6/99 (0655)	ND(0.040)	1,000'-999'	Collected from northwest side wall of Area Y.
AS-SLC000016-0-0100	8/5/99	8/6/99 (1030)	ND(0.58)	1,000'-999'	USEPA split sample of AS-PE-COMP-55.
AS-PE-COMP-56	8/5/99	8/6/99 (0655)	ND(0.043)	997'-995'	Collected from north center side wall of Area Y.

(See Notes on Page 10)

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(PCB results are presented in dry-weight parts per million, ppm)

Sample ID	Date Sample Collected	Date and Time Sample Results Received	PCB Analytical Result	Sampling Interval	Comments
AS-PE-COMP-57	8/5/99	8/6/99 (0655)	ND(0.039)	999'-997'	Collected from north center side wall of Area Y.
AS-PE-COMP-58	8/5/99	8/6/99 (0655)	ND(0.036)	1,001'-999'	Collected from north center side wall of Area Y.
AS-PE-COMP-59	8/5/99	8/6/99 (0655)	ND(0.038)	997'-995'	Collected from northeast side wall of Area Y.
AS-PE-COMP-60	8/5/99	8/6/99 (0655)	ND(0.038)	999'-997'	Collected from northeast side wall of Area Y.
AS-PE-COMP-61	8/5/99	8/6/99 (0655)	0.38	1,000'-999'	Collected from northeast side wall of Area Y.
AS-PE-COMP-64	8/5/99	8/6/99 (0655)	ND(0.038)	997'-995'	Collected from east side wall of Area Y.
AS-PE-COMP-65	8/5/99	8/6/99 (0655)	ND(0.037)	999'-997'	Collected from east side wall of Area Y.
AS-PE-COMP-66	8/5/99	8/6/99 (0655)	0.090	1,000'-999'	Collected from east side wall of Area Y.
AS-PE-COMP-67	8/6/99	8/7/99 (0232)	ND(0.044)	997'-995'	Collected from southeast/center side wall of Area Y.
AS-PE-COMP-68	8/6/99	8/7/99 (0232)	0.057	999'-997'	Collected from southeast/center side wall of Area Y.
AS-SLC00018-0-0100	8/6/99	8/7/99 (0930)	ND(0.59)	999'-997'	USEPA split sample of AS-PE-COMP-68.
AS-PE-COMP-69	8/6/99	8/7/99 (0232)	0.024 J	1,001'-999'	Collected from southeast/center side wall of Area Y.
AS-PE-COMP-70	8/6/99	8/7/99 (0137)	ND(0.041)	997'-995'	Collected from south side wall (east half) of Area Y.
AS-PE-COMP-71	8/6/99	8/7/99 (0137)	ND(0.041)	999'-997'	Collected from south side wall (east half) of Area Y.
AS-PE-COMP-72	8/6/99	8/7/99 (0137)	ND(0.038)	997'-995'	Collected from south side wall (west half) of Area Y.
AS-PE-COMP-73	8/6/99	8/7/99 (0137)	ND(0.042)	999'-997'	Collected from south side wall (west half) of Area Y.
AS-PE-COMP-74	8/6/99	8/7/99 (0232)	1.2	1,010'-1,008'	Collected from south/east side wall of Area A.
AS-PE-COMP-75	8/6/99	8/7/99 (0232)	0.032 J	1,010'-1,008'	Collected from south/west side wall of Area A.

(See Notes on Page 10)

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Sample ID	Date Sample Collected	Date and Time Sample Results Received	PCB Analytical Result	Sampling Interval	Comments
AS-PE-COMP-76	8/6/99	8/7/99 (0232)	0.97	1,007'-1,005'	Collected from west side wall of Area OO.
AS-PE-DUP-8	8/6/99	8/7/99 (0232)	0.86	1,007'-1,005'	Duplicate sample of AS-PE-COMP-76.
AS-PE-COMP-84	8/7/99	8/8/99 (2009)	ND(0.041)	1,001'-999'	Collected from east side wall of Area W.
AS-PE-COMP-90	8/11/99	8/12/99 (0654)	0.079	1,003'-1,005'	Collected from north side wall of Area PP.
AS-PE-DUP-10	8/11/99	8/12/99 (0654)	0.069	1,003'-1,005'	Duplicate sample of AS-PE-COMP-90.
AS-PE-COMP-91	8/11/99	8/12/99 (0654)	1.0	1,003'-1,005'	Collected from west side wall of Area PP.
AS-PE-COMP-92	8/11/99	8/12/99 (0654)	0.44	1,001'-1,003'	Collected from west side wall of Area YYY.
AS-SLC00020-0-0020	8/11/99	8/12/99	ND(0.59)	1,001'-1,003'	USEPA split sample of AS-PE-COMP-92.
AS-PE-COMP-95	8/11/99	8/12/99 (0654)	1.3	999'-1,001'	Collected from east side wall of Area U.
AS-PE-COMP-97	8/11/99	8/12/99 (0654)	0.79	999'-1,001'	Collected from east side wall (south end) of Area V.
AS-PE-COMP-98	8/11/99	8/12/99 (0654)	1.3	1,001'-1,003'	Collected from east side wall (south end) of Area V.
AS-PE-COMP-103	8/12/99	8/12/99 (1703)	0.34	1,001'-1,003'	Collected from east side wall of Area HH.
AS-PE-COMP-104	8/12/99	8/12/99 (1703)	ND(0.038)	1,001'-1,003'	Collected from south side wall of Area PP.
AS-PE-COMP-107	8/12/99	8/13/99 (0706)	1.2	1,003'-1,005'	Collected from east side wall (south end) of Area II.
AS-PE-COMP-109	8/12/99	8/13/99 (0706)	0.14	995'-997'	Collected from east side wall of Area R.
AS-PE-COMP-110	8/12/99	8/13/99 (0706)	0.094	997'-998'	Collected from east side wall of Area R.
AS-PE-COMP-111	8/12/99	8/13/99 (0706)	0.087	995'-997'	Collected from north side wall (east side) of Area R.
AS-PE-COMP-112	8/12/99	8/13/99 (0706)	0.0074 JN	997'-998'	Collected from north side wall (east side) of Area R.

(See Notes on Page 10)

Table 1**General Electric Company -- Pittsfield, Massachusetts****Final Completion Report for the Allendale School Property Removal Action****Confirmation Soil Sample Results (Remaining Soils)**

(PCB results are presented in dry-weight parts per million, ppm)

Sample ID	Date Sample Collected	Date and Time Sample Results Received	PCB Analytical Result	Sampling Interval	Comments
AS-PE-COMP-114	8/12/99	8/13/99 (0706)	0.0033 JN	995'-997'	Collected from north/west side walls of Area R.
AS-PE-COMP-115	8/12/99	8/13/99 (0706)	0.22	997'-999'	Collected from north/west side walls of Area R.
AS-PE-COMP-117	8/13/99	8/14/99 (0648)	0.36	999'-1,001'	Collected from the east side wall (north end) of Area V.
AS-PE-COMP-118	8/13/99	8/14/99 (0648)	ND(0.041)	997'-999'	Collected from northeast side wall of Area P.
AS-PE-COMP-119	8/13/99	8/14/99 (0648)	ND(0.042)	997'-999'	Collected from northwest side wall of Area P.
AS-PE-COMP-120	8/13/99	8/14/99 (0648)	1.8	999'-1,001'	Collected from northwest side wall of Area P.
AS-PE-COMP-121	8/13/99	8/14/99 (0648)	0.56	1,003'-1,005'	Collected from west side wall (south side) of Area SS.
AS-PE-COMP-122	8/13/99	8/14/99 (0648)	ND(0.043)	1,002'-1,003'	Collected from the northwest corner of Area J.
AS-PE-COMP-123	8/13/99	8/14/99 (0648)	0.15	1,003'-1,005'	Collected from the northwest corner of Area J.
AS-SLC-00023-0-0040	8/13/99	8/17/99	0.58	1,003'-1,005'	USEPA split sample for AS-PE-COMP-123.
AS-PE-COMP-124	8/13/99	8/14/99 (0648)	ND(0.040)	1,002'-1,003'	Collected from the west side of Area J.
AS-PE-COMP-125	8/13/99	8/14/99 (0648)	0.15	1,003'-1,005'	Collected from the west side of Area J.
AS-PE-COMP-126	8/13/99	8/14/99 (0648)	ND(0.039)	1,002'-1,003'	Collected from the north side of Area J.
AS-PE-COMP-127	8/14/99	8/15/99 (1928)	0.073	1,001'-1,003'	Collected along the west side of Area GG.
AS-PE-COMP-129	8/14/99	8/15/99 (1928)	0.83	1,003'-1,005'	Collected along the north side (south end) of Area II.
AS-PE-DUP-11	8/14/99	8/15/99 (1928)	0.93	1,003'-1,005'	Duplicate sample of AS-PE-COMP-129.
AS-PE-COMP-131	8/14/99	8/15/99 (1928)	1.1	1,005'-1,006'	Collected along the west side of Area N.
AS-PE-COMP-132	8/14/99	8/15/99 (1928)	1.1	1,005'-1,006'	Collected along the north side of Area N.

(See Notes on Page 10)

Table 1**General Electric Company -- Pittsfield, Massachusetts****Final Completion Report for the Allendale School Property Removal Action****Confirmation Soil Sample Results (Remaining Soils)**

(PCB results are presented in dry-weight parts per million, ppm)

Sample ID	Date Sample Collected	Date and Time Sample Results Received	PCB Analytical Result	Sampling Interval	Comments
AS-PE-COMP-135	8/14/99	8/15/99 (1928)	1.3	1,001'-1,003'	Collected along the west side of Area O.
AS-PE-COMP-140	8/16/99	8/17/99 (0703)	0.25	1,003'-1,005'	Collected from the east side wall of Area II.
AS-SLC00026-0-0020	8/16/99	8/17/99 (0930)	ND(0.60)	1,003'-1,005'	USEPA split sample of AS-PE-COMP-140.
AS-PE-COMP-141	8/16/99	8/17/99 (0703)	0.017 J	1,003'-1,005'	Collected from the east side wall of Area II.
AS-SLC00027-0-0020	8/16/99	8/17/99 (0930)	ND(0.62)	1,003'-1,005'	USEPA split sample of AS-PE-COMP-141.
AS-PE-COMP-142	8/16/99	8/17/99 (0703)	1.4	1,003'-1,005'	Collected from the east side wall of Area II.
AS-PE-COMP-148	8/17/99	8/17/99 (1625)	1.5	1,001'-1,003'	Collected along the north side wall of Area T.
AS-SLC00028-0-0040	8/17/99	8/18/99 (1100)	1.7	1,001'-1,003'	USEPA split sample of AS-PE-COMP-148.
AS-PE-COMP-150	8/17/99	8/18/99 (2032)	0.0050 JN	995'-997'	Collected from the north side wall of Area L.
AS-PE-COMP-151	8/17/99	8/18/99 (2032)	ND(0.039)	997'-999'	Collected from the north side wall of Area L.
AS-PE-COMP-152	8/17/99	8/18/99 (2032)	0.034 J	999'-1,001'	Collected from the north side wall of Area L.
AS-PE-COMP-153	8/17/99	8/18/99 (0654)	0.0037 JN	995'-997'	Collected from the northeast sidewall of Area L.
AS-PE-COMP-154	8/17/99	8/18/99 (0654)	0.0059 JN	997'-999'	Collected from the northeast sidewall of Area L.
AS-PE-COMP-155	8/17/99	8/18/99 (0654)	0.74	999'-1,001'	Collected from the northeast sidewall of Area L.
AS-PE-COMP-156	8/17/99	8/18/99 (0654)	1.5	999'-1,001'	Collected from the sidewall of Areas K and W.
AS-SLC00029-0-0060	8/17/99	8/18/99 (1100)	2.4	999'-1001'	USEPA split sample of AS-PE-COMP-156. This sample result was averaged with AS-PE-COMP-156 results in an average result of 1.955 ppm PCBs. No additional sampling is required since the average is below 2 ppm.

(See Notes on Page 10)

Table 1**General Electric Company -- Pittsfield, Massachusetts****Final Completion Report for the Allendale School Property Removal Action****Confirmation Soil Sample Results (Remaining Soils)**

(PCB results are presented in dry-weight parts per million, ppm)

Sample ID	Date Sample Collected	Date and Time Sample Results Received	PCB Analytical Result	Sampling Interval	Comments
AS-PE-COMP-157	8/17/99	8/18/99 (2032)	0.0037 JN	998'-1,000'	Collected from the sidewall of Areas S and TT.
AS-PE-COMP-160	8/17/99	8/18/99 (2032)	0.061	999'-1,001'	Collected from the east sidewall of Area I.
AS-PE-COMP-162	8/18/99	8/18/99 (2032)	0.20	1,001'-1,003'	North sidewall (west end) of Area W.
AS-PE-COMP-165	8/18/99	8/19/99 (0639)	0.084	999'-1,001'	West sidewall of Area L using the geoprobe.
AS-PE-COMP-166	8/18/99	8/19/99 (0639)	0.0081 JN	997'-999'	West sidewall of Area L using the geoprobe.
AS-PE-COMP-167	8/18/99	8/19/99 (0639)	0.11	995'-997'	West sidewall of Area L using the geoprobe.
AS-SLC00030-0-0080	8/18/99	8/19/99	ND(0.58)	995'-997'	USEPA split sample of AS-PE-COMP-167.
AS-PE-COMP-169	8/19/99	8/20/99 (1524)	0.091	1,000'-1,001'	North/east sidewall of Area TT.
AS-PE-COMP-170	8/19/99	8/20/99 (1524)	ND(0.039)	1,000'-1002'	North/east sidewall of Area TT.
AS-PE-COMP-173	8/20/99	8/20/99 (1524)	0.021 J	995'-997'	Southwest sidewall of Area L.
AS-PE-COMP-174	8/20/99	8/20/99 (1524)	0.13	997'-999'	Southwest sidewall of Area L.
AS-PE-COMP-176	8/20/99	8/21/99 (0714)	0.24	995'-997'	South and southeast sidewalls of Area L.
AS-PE-COMP-177	8/20/99	8/21/99 (0714)	0.28	997'-999'	South and southeast sidewalls of Area L.
AS-PE-COMP-179	8/20/99	8/21/99 (0714)	0.0086 JN	1,001'-1,003'	West sidewall of Area UU.
AS-PE-COMP-180	8/20/99	8/21/99 (0714)	0.22	1,003'-1,005'	West sidewall (north) of Area U.
AS-PE-COMP-181	8/20/99	8/21/99 (0714)	0.16	1,005'-1,006'	West sidewall (north) of Area U.
AS-SLC00033-0-0020	8/20/99	8/21/99 (0730)	ND(0.57)	1,005'-1,006'	USEPA split sample of AS-PE-COMP-181.
AS-PE-COMP-182	8/20/99	8/21/99 (0714)	0.81	1,001'-1,003'	West sidewall (south) of Area UU.

(See Notes on Page 10)

Table 1**General Electric Company -- Pittsfield, Massachusetts****Final Completion Report for the Allendale School Property Removal Action****Confirmation Soil Sample Results (Remaining Soils)**

(PCB results are presented in dry-weight parts per million, ppm)

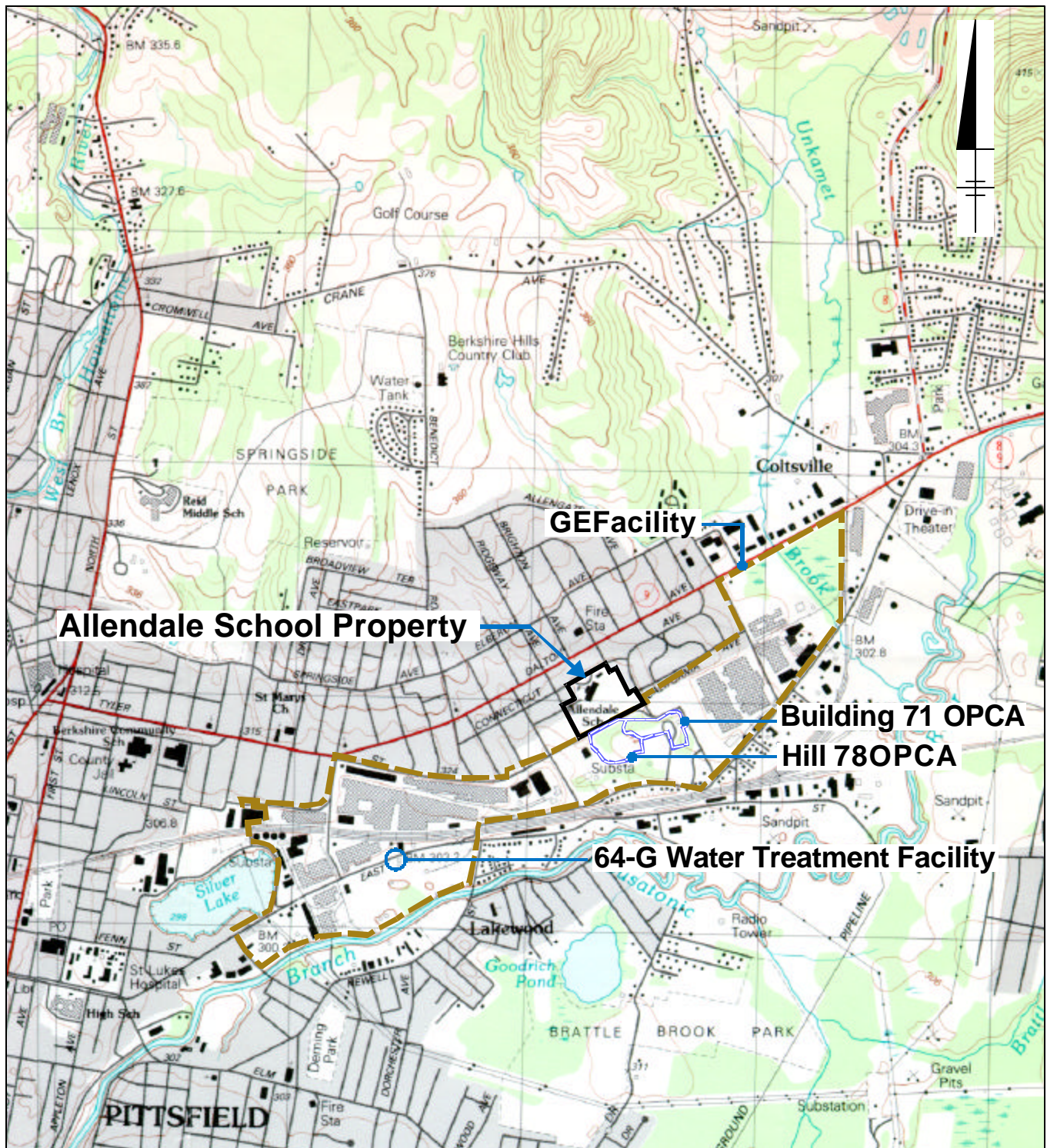
Sample ID	Date Sample Collected	Date and Time Sample Results Received	PCB Analytical Result	Sampling Interval	Comments
AS-PE-COMP-183	8/20/99	8/21/99 (0714)	1.4	1,003'-1,005'	West sidewall (south) of Area UU.
AS-PE-COMP-187	8/20/99	8/21/99 (0714)	1.8	1,003'-1,005'	North sidewall of Area XX.
AS-PE-COMP-188	8/21/99	8/21/99 (2158)	ND(0.042)	1,001'-1,002'	South sidewall of Area J.
AS-PE-COMP-189	8/23/99	8/23/99 (2326)	0.063 J	1,003'-1,005'	East sidewall (south) of Area II.
AS-PE-COMP-191	8/20/99	8/21/99 (0714)	ND(0.042)	995'-997'	Small segment on east sidewall of Area P.
AS-PE-COMP-192	8/20/99	8/21/99 (0714)	0.36	999'-1,001'	East sidewall of Area O.

Notes:

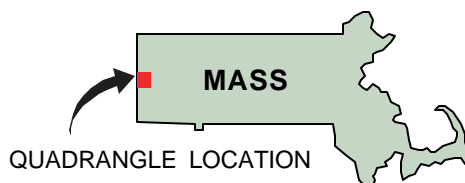
1. Entries in this table represent soil remaining after excavation activities were completed. Refer to Figure 3 for an illustration of sampling locations associated with these data and to Appendix C for validation of these data.
2. Samples were collected by Blasland Bouck & Lee, Inc., and analyzed for PCBs by Adirondack Environmental Services, Inc. using USEPA SW-846 Method 8082.
3. Locations of confirmation soil samples remaining after excavation activities were completed are shown on Figure 3.
4. ND(0.056) -- Not detected. Value in parentheses is the associated detection limit.
5. 2-4' BGS (1014'-1012') -- Feet below existing ground surface. Corresponding depth increment in feet above mean sea level is presented in parentheses.
6. J -- Estimated value less than the CLP-required quantitation limit.
7. JN -- Estimated value less than the CLP-required quantitation limit, but the presence of the compound could not be confirmed during a secondary analysis. The detected compound is presented as "tentatively identified at an approximate concentration".

Figures

BLASLAND, BOUCK & LEE, INC.
engineers & scientists



REFERENCE: PITTSFIELD EAST, MASS. USGS QUADS., 7.5 MIN. SERIES, 1988



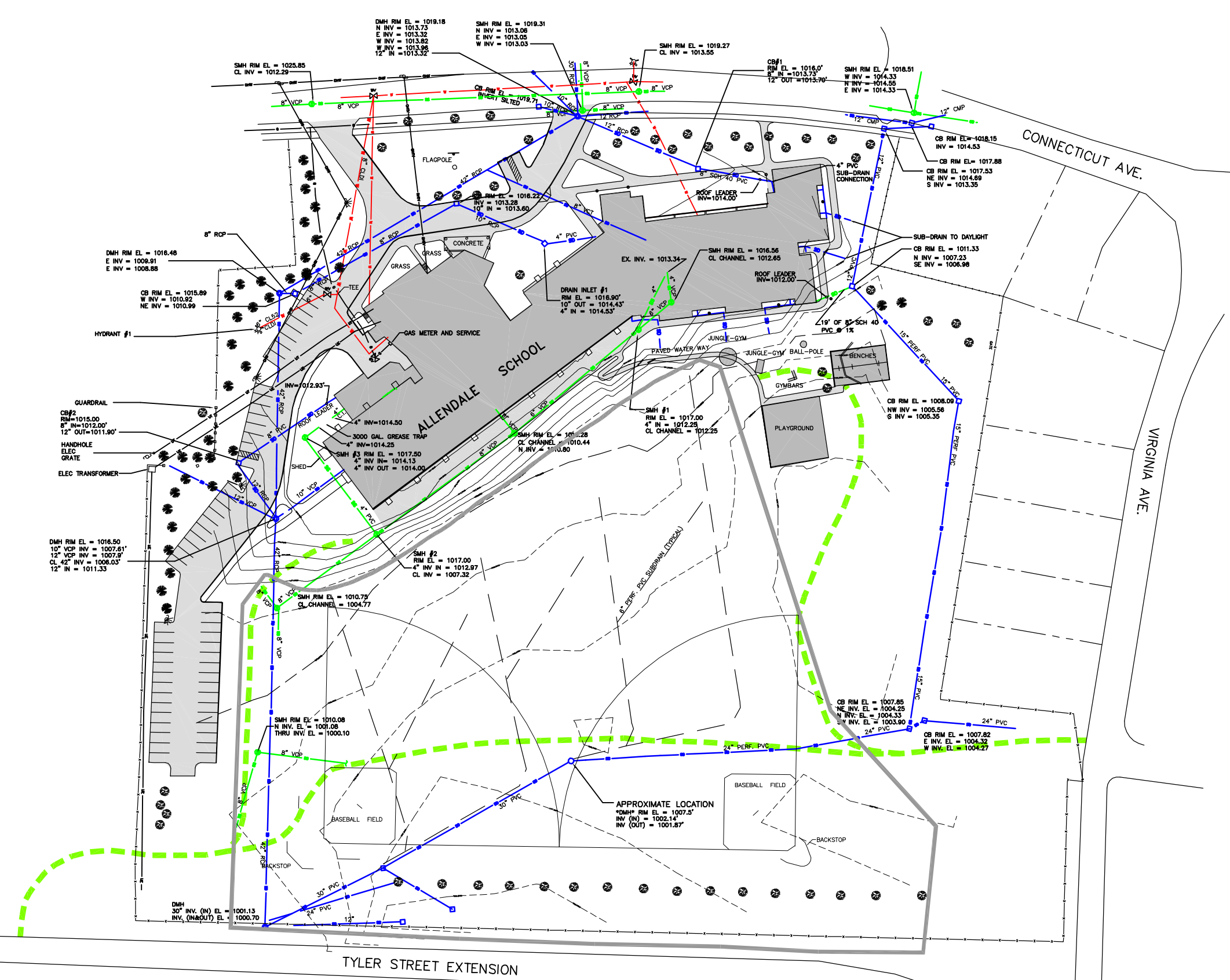
GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS
FINAL COMPLETION REPORT FOR THE
ALLENDALE SCHOOL REMOVAL ACTION

SITE LOCATION MAP

BBL

BLASLAND, BOCK & LEE, INC.
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FIGURE
1



LEGEND

- EXISTING WATER VALVE
- GAS VALVE
- EXISTING HYDRANT
- EXISTING TREE - DECIDUOUS
- EXISTING TREE - CONIFEROUS
- EXISTING POLE WITH GUY
- LIGHT POLE
- EXISTING SEWER MANHOLE
- CATCH BASIN
- YARD LIGHT
- APPROXIMATE LIMIT OF 2-FOOT THICK SOIL COVER
- APPROXIMATE LOCATION OF TEMPORARY ACCESS ROADS
- EXISTING FENCE
- EXISTING GUARD RAIL
- SANITARY SEWER
- STORM DRAIN
- UNDERGROUND ELECTRIC
- UNDERGROUND TELEPHONE
- UNDERGROUND TELEVISION CABLE
- OVERHEAD WIRE
- WATER LINE
- GAS LINE
- CB = CATCH BASIN
- SMH = SANITARY MANHOLE
- DMH = DRAINAGE MANHOLE

NOTE:

1. BASE MAP AND ALL UTILITIES SUPPLIED BY WHITE ENGINEERING, INC. DRAWING NO. L-5 "UTILITIES PLAN" DATED MARCH 5, 1997.
2. LOCATIONS OF UTILITIES ARE APPROXIMATE.
3. NOT ALL PHYSICAL FEATURES ARE SHOWN.

100' 0 100'

GRAPHIC SCALE

GENERAL ELECTRIC COMPANY, PITTSFIELD MASSACHUSETTS

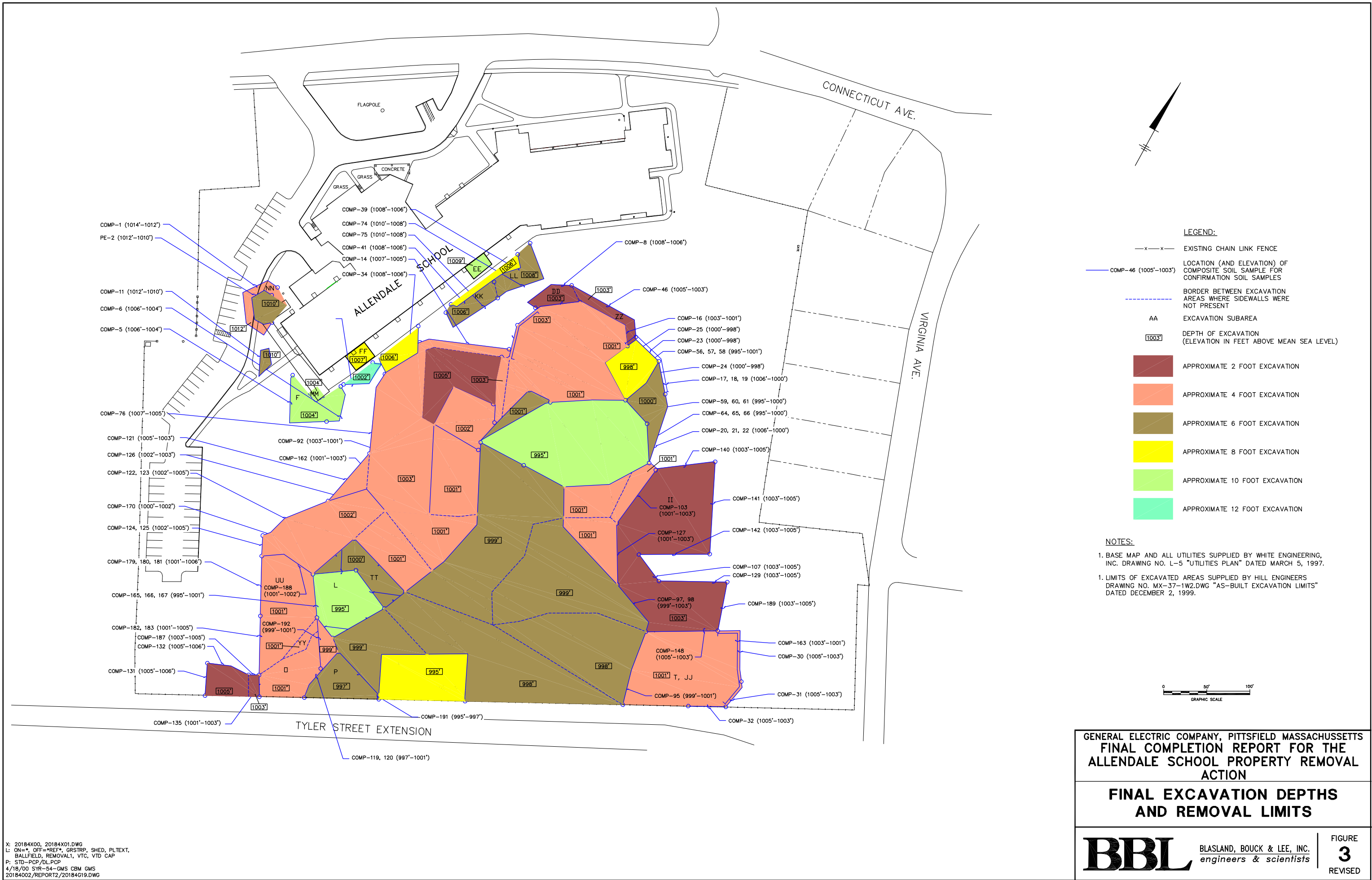
**FINAL COMPLETION REPORT FOR THE
ALLENDALE SCHOOL REMOVAL ACTION**

PRE-CONSTRUCTION SITE PLAN

BBL BLASLAND, BOUCK & LEE, INC.
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FIGURE
2

X: 20184X00, 20184X01, 20184X02.DWG
L: ON=*, OFF=*REF*, *GRSTRP, PLTEXT,
ELEV, PNTS
P: STD-PCP/BL-PCP
2/17/00 SYR-54-GMS CBM GMS
20184002/REPORT2/20184G11.DWG



X: 20184X00, 20184X01.DWG
L: ON=*, OFF=REF*, GRSTRP, SHED, PLTEXT,
BALLFIELD, REMOVAL1, VTC, VTD CAP
P: STD-PCP/DLPCP
4/18/00 SYR-54-GMS CBM GMS
20184002/REPORT2/20184G19.DWG

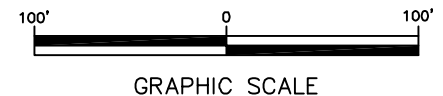


LEGEND:

- ⊗ EXISTING SEWER MANHOLE
- CATCH BASIN
- x - EXISTING FENCE
- - - EXISTING GUARD RAIL
- EXISTING DRAINAGE LINES AFFECTED BY SOIL REMOVAL ACTIONS WHICH REQUIRED LIKE KIND RESTORATION
- ADDED DRAINAGE SYSTEM ENHANCEMENTS
- EXISTING SANITARY SEWER LINE AFFECTED BY SOIL REMOVAL ACTIONS WHICH REQUIRED LIKE KIND RESTORATION

NOTE:

1. BASE MAP SUPPLIED BY WHITE ENGINEERING, INC. DRAWING NO. L-5 "UTILITIES PLAN" DATED MARCH 5, 1997.
2. LOCATIONS OF UTILITIES ARE APPROXIMATE.
3. POST-REMOVAL ACTION TOPOGRAPHY AND CATCH BASIN RIM ELEVATIONS SUPPLIED BY HILL ENGINEERS AS-BUILT RESTORATION PLAN FOR ALLENDALE SCHOOL, DATED NOVEMBER 18, 1999.



GENERAL ELECTRIC COMPANY, PITTSFIELD MASSACHUSETTS
**FINAL COMPLETION REPORT FOR THE
 ALLENDALE SCHOOL REMOVAL ACTION**

**SITE DRAINAGE LINE
 RESTORATION PLAN**

BBL BLASLAND, BOUCK & LEE, INC.
 engineers & scientists

FIGURE
4

X: 20184X00, 20184X01, 20184X02.DWG
 L: ON=*,OFF=*,BALLFIELD, CAP, GRSTRP,
 PLTEXT, PLAYGROUND, VTC, VTD
 P: STD-PCP/BL-PCP
 2/17/00 SYR-54-GMS
 20184002/REPORT2/20184G20.DWG

Appendices

BLASLAND, BOUCK & LEE, INC.
engineers & scientists
